

REMARKS

Reconsideration of this application is respectfully requested. Upon amendment claims 65-67 are pending.

Applicants thank Examiner Parkin for the courtesy of the Interview of December 4, 2003. During the Interview, applicants traversed the rejection under 35 U.S.C. § 112, first paragraph. In addition, the above amendments were discussed, and the Examiner agreed that the amended claims should be allowable. No new matter has been introduced as a result of this amendment.

Claims 35-40 were rejected under 35 U.S.C. § 112, first paragraph, for allegedly containing subject matter that was not described in the specification in such way as to reasonably convey that applicants had possession of the claimed invention at the time the application was filed. Applicants traverse the rejection.

Applicants isolated a novel HIV-1 isolate, HIV-1ELI, and provided its complete nucleotide sequence. (Specification at Fig. 7.) At the time the application was filed, the nucleotide sequence of three HIV-1 viruses was known: HIV-1IIB, HIV-1BRU, and HIV-1ARV-2. (*Id.* at 2, lines 2-6.) The nucleotide sequence of HIV-1ELI differed from the known HIV-1 viruses to a much greater extent than the sequences of the known viruses differed from each other. (*Id.* at 2, lines 30-35.) Thus, applicants discovered that the heterogeneity of HIV-1 was much greater than that which had been previously appreciated.

Applicants' claims recite a virus encoding an Env protein that comprises amino acids of HIV-1ELI Env protein that are not present in the three known viruses.

Applicants' comparisons in Fig. 3 provide a blueprint of amino acids found in HIV-1ELI

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that are not present in the sequences of HIV-1BRU and HIV-1ARV-2 at the same positions. Using this blueprint the skilled artisan could generate an enormous genus of HIV-1ELI variants containing HIV-1ELI-specific amino acids. For example, the skilled artisan could generate an HIV-1 virus containing any of the HIV-1ELI-specific amino acids sequence variations shown in Fig. 3, such as a serine at aa 63 and/or an isoleucine at aa 71. Thus, the skilled artisan would understand that applicants had possession of the claimed invention at the time the application was filed. Accordingly, applicants respectfully request withdrawal of the rejection.

Applicants respectfully submit that this application is in condition for allowance. In the event that the Examiner disagrees, he is invited to call the undersigned to discuss any outstanding issues remaining in this application in order to expedite prosecution.

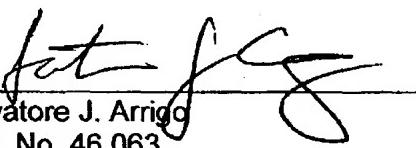
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: February 19, 2004

By:


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